Common Enterprise Forums

Infrastructure IPT

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Executive Summary

The DoD Joint Vision 2010 and Joint Vision 2020 detail crucial themes for objectives, interoperability, logistics readiness, focused logistics, and cost reduction. To meet these objectives, organizations and communities that share common missions and requirements must communicate about, agree on, and implement the necessary standard solutions. The Defense Standardization Program (DSP) is an essential participant in the dialogue.

The infrastructure integrated product team (IPT) proposed a new DSP structure (see Tab C2). The new structure includes standardization area support teams (SAST) and their area standardization executive (ASE) members. The SASTs support the customers in a common community referred to as domains, functional areas, or communities of common interest. The SAST members, including the ASEs, must work with and support all customers in a domain.

Domains are communities with common requirements and opportunities for increased interoperability, commonality, and interchangeability. The proposed structure of the DSP will better support emerging standardization needs by better aligning the DSP with customers. To achieve the objectives, the customers also will need to change.

This deliverable proposes using customer-led common enterprise forums to facilitate cross-community dialogue that supports interoperability, logistics readiness, and cost reduction by using common solutions. By using the forums, the DSP also will have a single customer-led executive body to articulate a "voice of the customer." The forum will help focus and define the DSP products and services needed to optimally support the community.

Specific recommendations described in this deliverable are the following:

ν   Recommendation #1: DSP should advocate using effective domain-focused forums (common enterprise forums) for advancing interoperability, logistics readiness, and strategic standardization.

ν   Recommendation #2: Identify key common enterprise communities, establish portal-based forums, and demonstrate the value of using forums.

ν   Recommendation #3: Develop, implement, and maintain knowledge management resources and tools to support the common enterprise forums.

Introduction

BACKGROUND

The DSP is a comprehensive, integrated standardization program linking DoD acquisition, operational, sustainment, and related communities. It champions standardization throughout DoD to reduce costs and improve operational effectiveness. DSP also provides access to standardization processes, products, and services and promotes interoperability, reduced total ownership costs, and logistics readiness**.**

The DSP has the difficult task of distilling the "voice of the customer" out of the shouts of many separate program voices. By using common enterprise forums, DSP could provide strategic products and services that better satisfy customers' needs.

Attaining interoperability is one of DoD's top priorities. Standardization is a key to enabling interoperability. Most current efforts to improve interoperability focus on communication and information technology. Material interoperability, an essential element in interoperability, has received far less attention. Having same size ammunition is essential if we are to share ammunition. Having interoperable fueling nozzles and receptacles is essential if we are to refuel each other's aircraft in flight. Having interoperable replenishment-at-sea capabilities is essential if ships from different nations are to transfer munitions and supplies between ships at sea.

To achieve interoperability requires greater emphasis on using solutions that are already developed and sharing technical solutions with other programs. Also, to achieve interoperability, common technical problems must have common technical solutions. However, programs typically focus on meeting their schedule, budget, and system requirements. This focus often precludes seeking shared solutions (standardization) with other programs.

The DSP has established structures, processes, and interfaces with its customers at working levels that primarily focus on creating, coordinating, maintaining, or managing standardization documents. The Infrastructure IPT proposed a new structure, alignment, and interface with the customer community to better serve the customer community. This deliverable recommends using effective forums that facilitate community-wide dialogue more to strategically advance interoperability, logistics readiness, and focused logistics and reduce costs.

SPECIFIC IPT TASKING

This deliverable was prepared in response to the DSP Strategic Plan, which supports the infrastructure goal and Task Action V.D.1.

Infrastructure Goal: A DSP infrastructure, sufficiently resourced, that comprehensively integrates the DoD acquisition, operational, sustainment, information technology, and related communities.

Objective V.D		
DSP has implemented a comprehensive, flexible, dynamic, seamless (i.e., subsets of materiel, processes, and technology) structure.		
Action V.D.1:	**Key Steps:**	**Lead**
Analyze alternatives to the current structures.	1. Departmental Standardization Offices (DepSOs) meet to scope and define the desired future state. 2. Analyze existing structures. 3. Define a new system. 4. Choose and implement the new structure.	Air Force

The functional area forum or board concept also has major implications for achieving objectives II.A and II.C.

Objective II.A:
The DSP has instituted an education and information exchange process to foster technical and standardization expertise across DoD communities.
Objective II.C:
DPS has coordinated cooperation among, and integrated processes with, the operational, acquisition, and logistics communities to lay the foundation for achieving logistics readiness through commonality of systems, components, and architectures.

Recommendations

RECOMMENDATION #1

DSP should advocate using effective domain-focused forums (common enterprise forums) for advancing interoperability, logistics readiness, and strategic standardization.

- υ Encourage using forums in domains and communities with common interests.

- υ Present the common enterprise forum concept to DoD leadership to obtain high-level sponsors and advocates.

- υ Use the ASEs and SASTs to promote using forums in their areas of responsibility.

RECOMMENDATION #2

Identify key common enterprise communities, establish portal-based forums, and demonstrate the value of using forums.

- υ Seek out existing forums and potential new forums for demonstrating the common enterprise forum concept.

- υ Establish domain-oriented knowledge management spaces on the Information Exchange System (IES) portal.

- υ Using the portal, establish working relationships and links to customer organizations.

- υ Encourage and enable customers to use the forums.

- υ Facilitate domain discussion about interoperability on the portal.

- υ Solicit customer feedback to the DSP about the forums.

RECOMMENDATION #3

Develop, implement, and maintain knowledge management resources and tools to support the common enterprise forums.

Create and implement portal capabilities, including

- υ lessons learned;

- υ frequently asked questions;

- υ query capabilities;

- υ links to points of contact (POCs) and committees;

- υ user feedback; and

- υ links to other domain-related databases, tools, and resources.

Concept Overview

COMMON ENTERPRISE FORUMS

A common enterprise exists wherever two or more entities share a similar interest or activity. A common enterprise forum is a structure that enables individuals who represent entities with common interests to share dialogue and decision making. Such forums may be formal or informal, virtual or physical, temporary or permanent and they may have different names, such as

- υ board,

- υ committee,

- υ council,

- υ group,

- υ association,

- υ conference,

- υ initiative,

- υ joint program,

- υ team,

- υ panel,

- υ domain, and

- υ community of practice.

Their scope may be narrow or broad; they comprise few or many participants; and their focus may be high level or very detailed. The shared characteristics that define the community of common interest may include

- υ shared missions,

- υ similar requirements,

- υ like operating environments,

- υ common technologies,

υ   parallel logistics needs, and

υ   need for interoperability.

The participants in a common enterprise come together to share information, exchange ideas, discuss common issues, rationalize requirements, and find mutually beneficial solutions. Example defense-related common enterprise forums include

υ   Joint Technical Architecture,

υ   Joint Aeronautical Commanders Group,

υ   government and industry quality liaison panel,

υ   NATO standardization committees, and

υ   space radiation hardening initiative.

Appendix A lists more forums.

Interoperability, commonality, and standardized solutions are among the themes shared by common enterprise forums. These same themes are inherent in the DSP. The DSP can help common enterprise forums with solutions and should be involved. If communities of common interest do not have forums, the DSP can help advocate and support developing effective forums.

Important and substantial benefits of successful forums include

υ   increased interoperability,

υ   higher logistics readiness,

υ   lower costs,

υ   shorter cycle time,

υ   better performance,

υ   more efficient operation, and

υ   greater distribution of knowledge.

In its recommendations at Tab C2, the Infrastructure IPT has proposed a new DSP structure. The new structure includes SASTs and their ASE members. The SASTs comprise management and working-level individuals in the DSP and customer organizations who are involved with specifications and standards documents or in standardization decision-making. In the new DSP structure, the SASTs are organized to support the customers across a common community, referred to as domains or functional areas.

The SAST members, including the ASEs, must interface, work with, and support all customers across a domain. This task is complex and difficult, especially for large and diverse domains. Domain customers rarely agree on their needs. Getting good information about customers' needs and standardization opportunities across the entire the domain requires substantial resources. Interpreting that information and translating it into viable standardization products and services for the domain is exceptionally difficult.

Ideally, each SAST should have a particular individual, program, or body to articulate domain-wide requirements, that is, to be the voice of the customer. Such an entity would represent and synthesize the needs and opportunities of the domain into a coherent set of requirements. This is the proposed role of the common enterprise forums.
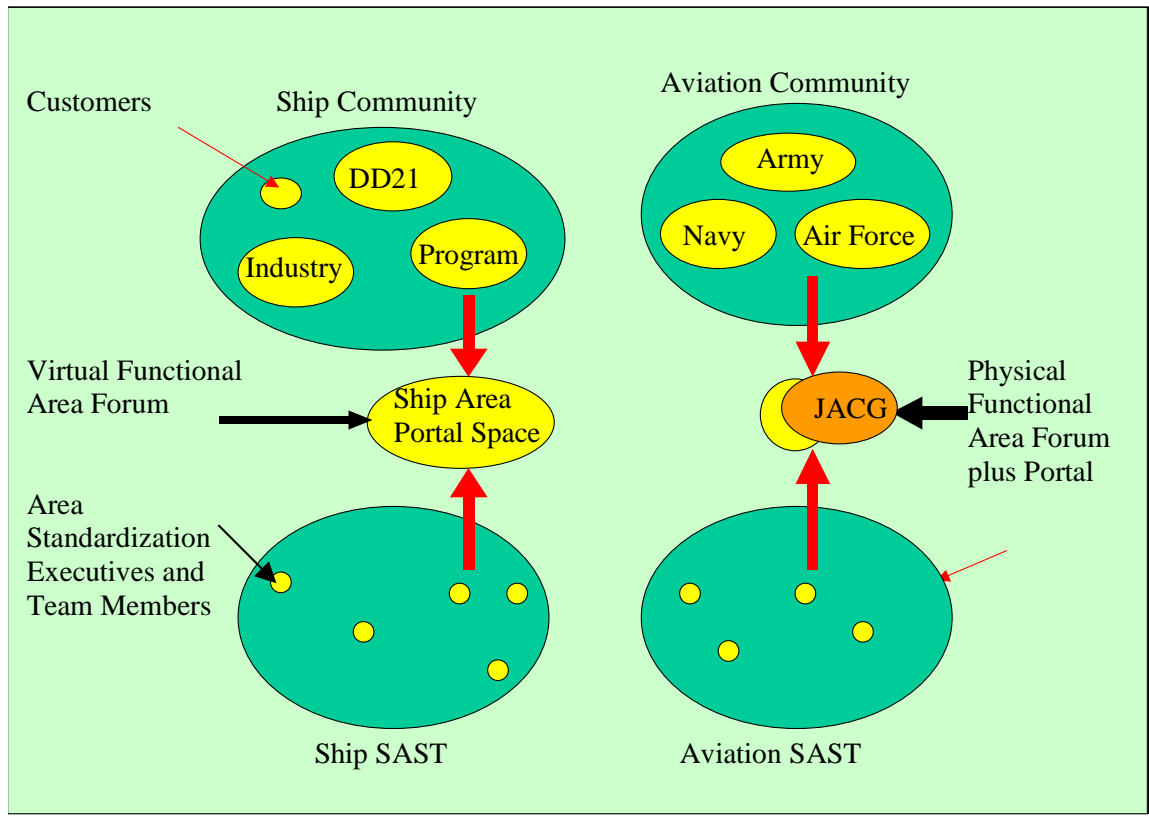
Common enterprise forums primarily exist in the customer's acquisition, requirements, and operations worlds instead of the DSP standardization world. The forums generally focus on their objectives, such as interoperability and logistics readiness. By participating in the forum, DSP can distill standardization opportunities and identify solutions from the forums' broader dialogue.

A SAST participates in the forum to bring it standardization perspective and to make available standardization tools, services, and expertise. By participating in the forum, a SAST can understand clearly how the DSP can better serve its customers' needs.

SAST INVOLVEMENT IN COMMON ENTERPRISE FORUMS

Figure 1 depicts notional relationships between DSP SASTs and customer communities that share common interests. On the top right of the figure the Army, Navy, and Air Force each has requirements, missions, and interests in aviation. The large oval at the bottom right depicts the DSP SAST with its ASEs who are involved with and support the aviation community. Between the aviation customer community and the DSP SAST is a common enterprise forum called the Joint Aeronautical Commanders Group (JACG). The JACG meets and operates both as a physical team with defined membership and in virtual space using Internet-based resources. The JACG helps define standard policy, procedures, practices, and engineering solutions that cut across the Joint aviation community. The deliberations and products of the JACG involve and influence the DSP. In many ways, the JACG represents the aviation community.

Figure 1: Functional Area Forum Relationship with the DSP

The large oval at the top left of the figure depicts the maritime community. The maritime community comprises the Navy, Coast Guard, maritime industry, and equivalent allied naval forces among others. This community shares a common operating environment, similar missions, like requirements, and many types of common technology or hardware. However, the community lacks a common goal. In contrast with the aviation example, the maritime forums are far less visible and less effective at integrating the needs of the total community into a coherent set of shared requirements. Several maritime forums exist that are focused on specific issues, such as developing international standardization agreements or promoting the use of common hull, mechanical, and electrical components.

The figure illustrates the diversity of opinions in the customer community and the absence of an enterprise-wide forum voicing the concerns of the maritime customer. Between the customer community and the DSP SAST that serves the maritime community, we show a notional virtual forum. This forum, created by maritime community leaders or available on the DSP IES portal, could help integrate the community and ensure common goals.

The DSP is important for promoting, defining, and documenting standard solutions that meet the requirements of diverse enterprise communities. For example, the DSP Lead Standardization Activity for the space community was instrumental

in creating a common enterprise forum for seeking standard solutions for space systems that required radiation hardening (RADHARD) to protect their valuable assets. The RADHARD initiative involves both customer and DSP people in seeking shared solutions. This achievement illustrates how the DSP can actively promote and support the creation of new enterprise forums.
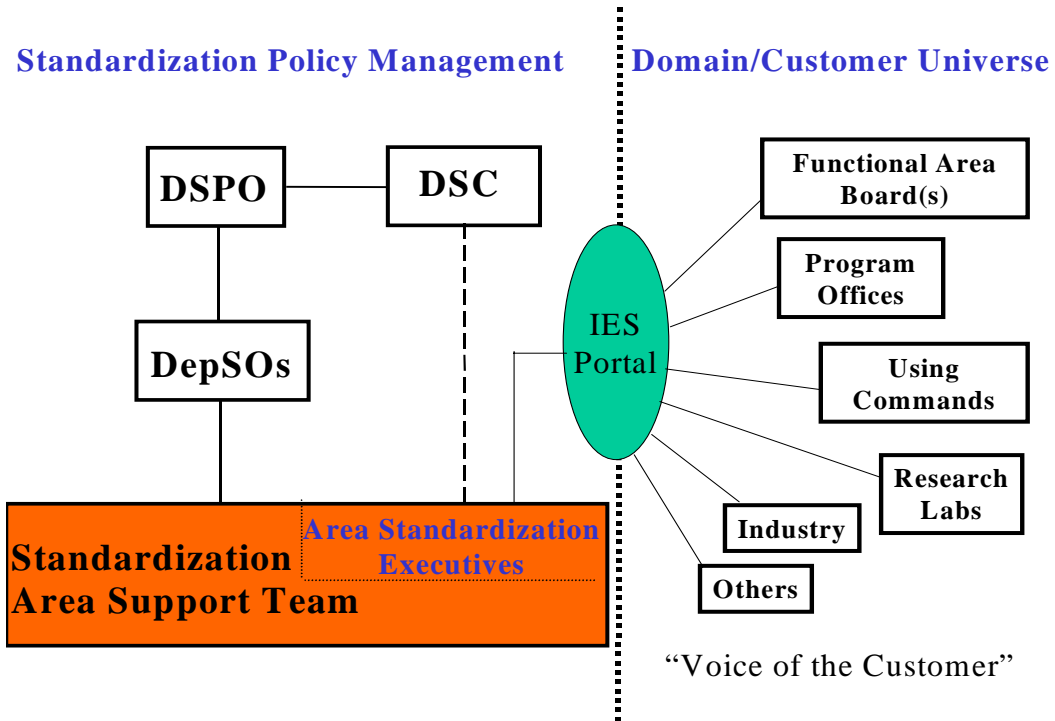
Forums are not "required" in every domain or functional area. The need for a forum depends entirely on the needs of the community. Community leaders in the customer universe and in the DSP decide whether or not to create a forum.

COMMON ENTERPRISE FORUMS AND THE NEW DSP STRUCTURE

The AF IPT has proposed a new DSP structure, illustrated in Figure 2. The new structure is responsible for serving its customers through effective products and services provided directly or through the IES portal. The SAST designated to support a customer community or domain must work with and listen to the customers to understand their needs, identify the standardization opportunities, and provide the right products at the right time. The SAST can stay current with customers evolving needs by routinely contacting each customer. However, superior results with less effort are likely if the DSP and its customers use a shared forum to articulate requirements and solutions.

Figure 2 shows the SAST interfacing with its customers primarily through the IES portal. The portal provides the customers with the products, services, tools, and information for satisfying their standardization needs. Likewise, the SAST receives feedback, requirements, and information from its customers that are essential for providing timely high-quality products and services. The functional area board shown on the customer side of the figure illustrates a notional common enterprise forum for the customer community. This forum helps synthesize the customers' desires by providing leadership and resources for stimulating, facilitating, and supporting community-wide dialogue.

Figure 2. Relationship of Functional Area Forums and Boards
to the DSP Structure

Standardization Policy Management   **Domain/Customer Universe**

DSPO — DSC

DepSOs

IES Portal

Functional Area Board(s)

Program Offices

Using Commands

Research Labs

Industry

Others

Standardization Area Support Team

Area Standardization Executives

"Voice of the Customer"

CREATING FUNCTIONAL AREA FORUMS AND BOARDS

Common enterprise forums help define the customer's business environment and are a structure for aligning the DSP with the customers' communities. For example, the Joint Technical Architecture (JTA) represents a broad spectrum of customers and providers in the C4I domain. The JTA promotes interoperability in the domain and its decisions affect logistics readiness for the domain.

ROLES AND RESPONSIBILITIES

Making a forum work will require support from leadership in both the DSP and customer communities. The commitment uses resources to execute respective roles and responsibilities.

The DSP should

υ develop a comprehensive and integrated domain-focused DSP infrastructure,

υ encourage leadership to support and promote using common enterprise forums,

- υ design and implement forums using the IES portal,

- υ provide information and guidance about forums,

- υ provide information about common materiel items across communities,

- υ foster technical and standardization expertise in domains or communities,

- υ provide lessons learned about forums,

- υ provide examples of successful forums,

- υ foster strong leadership and management to promote dialogue about inter-operability and standardization,

- υ provide domain-oriented products and services in response to customer requirements, and

- υ constructively influence customer-led common enterprise forums in shaping the DSP.

The customer community should

- υ provide leadership and resources to support common enterprise forums,

- υ use forums to identify common needs and opportunities,

- υ collectively define information requirements,

- υ work with the DSP to design and implement forums through the portal,

- υ promote using the portal-based forums in the wider community, and

- υ work with the DSP to promote interoperability and logistics readiness.

The portal is important because it

- υ facilitates community-wide technical dialogue and standardization decision processes,

- υ increases customer awareness, commitment, and participation in standardization,

- υ focuses and fosters technical and standardization expertise,

- υ enables the DSP to monitor its performance better for each domain,

υ   provides feedback from customers, and

υ   tailors the DSP products and services to meet customer needs.

THE DSP ROLE

The SAST and the ASEs routinely participate in the common enterprise forums. The SAST seeks out domain standardization needs and opportunities. SAST alignment with the community enables rapid response to customer needs. SAST participation and interaction between DSP and its customers assures greater DSP visibility and value. This participation will require resources and high-level advocacy. Defense leadership will need help to understand the wisdom and value of using common enterprise forums. Because the concept started in the DSP, DSP leadership should actively promote and support the concept.

SAST ROLES IN THE FORUMS

A key function of the SAST is to "manage the standardization requirements of the domain." The forum is a platform for deliberating and making decisions about interoperability and standardization needs for the domain. The SAST helps document forum standardization decisions. When the Office of the Secretary of Defense (OSD) establishes new standardization policy, the SAST communicates the policy to the forum and helps translate OSD standardization policy into domain standardization solutions.

The SAST supports forum meetings and makes available DSP products and services. The SAST assists the forum with identifying standardization opportunities. Using the IES portal, the SAST helps the customer community become aware of forum standardization decisions.

Appendix A
Existing Common Enterprise Forums

Common enterprise forums represent all the key constituencies in a domain. Several existing forums provide excellent cross-sectional representation from a domain. Among the existing bodies are the following:

υ Joint Technical Architecture

The JTA provides a common architecture of interfaces and standards for the C4I domain. The JTA mandates the minimum set of standards and guidelines for acquiring all DoD systems that produce, use, or exchange information and must be used by anyone managing, developing, or acquiring new or improved systems in DoD. The focus is on using commercial standards. Current and archived versions of the JTA may be downloaded from the Defense Information Systems Agency's DoD JTA website. JTA is perhaps the best example of a functional area forum or board and already performs many of their functions. What is missing is the formal forum or board link to the DSP.

υ Open Systems Joint Task Force

Using open systems ensures interoperability among systems procured by different acquisition organizations and developed by different vendors using common interfaces based on open standards. The Open Systems Joint Task Force (OSJTF) is a cooperative effort of the Army, Navy, Air Force, and the Office of the Under Secretary of Defense (Acquisition and Technology). OSJTF sponsors and accelerates the adoption of an open systems approach for new systems and system upgrades. The approach includes an "open systems strategy" for material systems and "an open systems architecture" for information systems that use open systems specifications and standards. The OSJTF seeks to standardize so common architecture and major interfaces can be used. Additional background, policy, frequently asked questions, tools, and other information are discussed on the OSJTF home page.

Perhaps an opportunity exists for defining "open systems" as a domain that cuts across several other domains. Doing so would create a forum space on the IES and links to the OSJTF home page that could draw interested parties to the DSP and inform them about DSP products and services.

υ Defense Information Infrastructure Common Operating Environment

The emphasis on ensuring interoperability and information that exists in DoD begins with the Defense information infrastructure common operating environment DII COE, which is a foundation for building open systems. The COE is a "plug and play" open architecture designed around a client/server model. The Defense Information Systems Agency (DISA) maintains the DII COE home page. The DII COE also should be considered as part of the open systems functional area forum or board.

υ Joint Interoperability Test Command

DISA's Joint Interoperability Test Command (JITC) webpage lists, among other information, a link to the joint interoperability tool, which provides high-speed, reliable access to key interoperability information for the warfighter. The heart of the system is an extensive data repository featuring the JITC lessons learned reports, JITC test reports, the NATO interface guide, Joint interoperability certification letters, and other interoperability documents and references; as well as a high-speed search engine to access data quickly. This tool gives a quick and easy on-line capability that identifies system and equipment characteristics, tested configurations, and practical "how-to" information to facilitate interoperability.

υ Joint Aeronautical Commanders' Group

The JACG develops and improves joint processes and procedures that facilitate designing, developing, and acquiring common aviation systems to maximize interoperability. The JACG developed a new type of standardization document, called a Joint Service Specification Guide. These documents are indexed in the Acquisition Streamlining and Standardization Information System. The JACG may be the core of the aviation functional area forum or board.

υ Joint Readiness Clinical Advisory Board (JRCAB)

The JRCAB is a joint activity operating under the direction, authority, and control of the Secretary of Defense with professional policy guidance from the Assistant Secretary of Defense (Health Affairs). The JRCAB's missions include standardizing medical materiel for use by all military services. In addition, other missions include achieving maximum standardization of deployable medical systems in the military, and providing clinical, technical, and logistical expertise to ensure high-quality medical materiel.